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TECHNICAL COMMISSION

Agenda Item 30: Other safety matters

**IMPLEMENTATION OF ICAO ENGLISH LANGUAGE PROFICIENCY
REQUIREMENTS IN SINGAPORE**

(Presented by Singapore)

EXECUTIVE SUMMARY

This paper outlines Singapore's approach to validate the English language proficiency levels for its pilots and air traffic controllers, in accordance with the new ICAO Standards. It describes Singapore's efforts to develop an aviation English screening and testing regime to meet local requirements, and Singapore's contributions to help build up Aviation English competencies for personnel and States worldwide.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objective A.
<i>Financial implications:</i>	Not applicable.
<i>References:</i>	<i>Manual on the Implementation of ICAO Language Proficiency Requirements</i> (Doc 9835)

1. INTRODUCTION

1.1 To address the need for effective communication between pilots and air traffic control (ATC) personnel, ICAO undertook a comprehensive review of English language proficiency requirements in 1997. This resulted in amendments to Annex 1- *Personnel Licensing* of the Chicago Convention in 2003, which mandated Contracting States to assess and certify all ATC personnel and pilots to demonstrate the ability to speak and understand English, to a minimum operational proficiency level (equivalent to Level 4 of the ICAO rating scale) after 5 March 2008, for flight operations in airspace where the use of English language is required.

1.2 This paper outlines Singapore's approach to validate the English language proficiency levels for its pilots and air traffic controllers, in compliance with the ICAO Standards.

2. SINGAPORE'S APPROACH – DEVELOPING A SCREENING AND TESTING REGIME

2.1 English is taught as the first language in schools and is the lingua franca in Singapore. Nevertheless, the Civil Aviation Authority of Singapore (CAAS), as the civil aviation regulator, needed a tool to objectively assess pilots and air traffic controllers to ensure that they comply with ICAO requirements on language proficiency.

2.2 As an initial step, Singapore sought to raise awareness within the local industry on the new ICAO requirements, and to engage local air operators such as Singapore Airlines at an early stage. By drawing in key stakeholders during the planning phase, this ensured a regular stream of feedback and buy-in from the industry on an approach which would best suit local conditions, as well as enabled the CAAS to tap onto their expertise and resources.

2.3 Following consultation with the industry, Singapore opted for a two-phased systematic approach, which would involve an initial screening process to validate only Level 6 proficiency, followed by a rigorous testing process for those personnel flagged up during the screening process. The objective was for the initial screening to identify personnel who meet Level 6 proficiency in an expeditious manner, and to concentrate resources and efforts on those whose proficiency level could not be determined during the initial screening, and required further assessment.

2.4 In January 2006, the CAAS partnered the Southeast Asian Ministers of Education Organisation Regional Language Centre (SEAMEO RELC), a Singapore-based English language training institution, to tap its experience and expertise in linguistics and language education. Language specialists from RELC worked closely with the CAAS, air operators and air traffic controllers, through a series of workshops, to develop a screening and testing regime, that would be relevant to and realistic in an operational environment.

2.5 A checklist-based screening methodology was thus conceived and took into account each candidate's language certification, background and assessment. The overall screening process is structured to be run by pilot and air traffic controller assessors, who are themselves certified at Level 6 Expert proficiency by RELC experts, or CAAS personnel rated at Level 6 proficiency. These assessors are required to undergo training on assessment techniques before being authorized to assess other pilots

and air traffic controllers on behalf of the CAAS. This stems from ICAO guidance that any person certified at Level 6 should have the competency to recognize another Expert speaker without further formal training, whereas language specialists are needed to precisely ascertain lower rungs of proficiency.

2.6 For ease and efficiency of implementation, the assessment, as part of the screening process, is integrated into existing procedures for recruitment, training and operational proficiency checks for pilots and air traffic controllers. Such an arrangement also serves to minimize disruptions to daily operations for air operators and air navigation service providers. A checklist for the assessment is used and the criteria to gauge Level 6 proficiency are clear and transparent to the candidate. This builds up confidence in the integrity of the process. Certified Level 6 personnel will subsequently have their licenses updated before 5 March 2008 to confirm their ability to speak English at an Expert level, and need not undergo re-testing, in line with ICAO guidance.

2.7 With the screening framework in place, the CAAS and RELC moved on to develop an Aviation English Competency Test (AECT), a tool designed to precisely determine the specific proficiency level of those pilots and air traffic controllers, who have not been assessed at Level 6 proficiency during the initial screening process. The AECT is an interview-based diagnostic test, conducted by a panel comprising an expert linguist and an operational subject-matter expert. It comprises four parts, namely: 1) self-introduction by the candidate; 2) a scenario-based role-play to assess the subject's proficiency with standard radiotelephony phraseology and dialogue; 3) a situational talk to assess the subject's broader English language ability in emergencies, e.g. in-flight medical emergency; and 4) closing dialogue on an aviation-related topic.

2.8 This rigorous and comprehensive process ensures that each candidate's proficiency level would be assessed, under operationally realistic conditions, in accordance with the six ICAO holistic descriptors and evaluated with reference to the ICAO rating scale. In adherence to ICAO guidance, any pilot or air traffic controller rated at Level 4 (just meeting operational requirements) and 5 (exceeding requirements, but not reaching Expert proficiency) will be required to undergo re-testing every 3 and 6 years respectively. At the same time, the CAAS will assist those, who have been rated at Level 3 and below, to attain the minimum Level 4 requirement, by encouraging them to undergo an aeronautical English training programme developed in conjunction with RELC.

2.9 To date, steady progress has been achieved with respect to the screening of pilots and air traffic controllers. Pilot screening, presently carried out by pilot assessors, rated at Level 6 proficiency and authorized by the CAAS, is on-going among all Singapore air operators and expected to be completed by year-end. The expected minority of pilots who require further testing under the AECT, will then do so from January 2008. Similarly, the screening process for all air traffic controllers in Singapore will be completed by end-2007. Following that, any air traffic controllers who have not been rated at Level 6 proficiency will undergo the AECT.

3. TRAINING INITIATIVES TO BUILD UP LANGUAGE COMPETENCIES

3.1 The Singapore Aviation Academy (SAA) has leveraged upon the accumulated experience and expertise to develop two training programmes, namely a three-week course on Meeting New ICAO Requirements in Aeronautical English, and a second, week-long Aeronautical English Train-the-Testers workshop. The 3-week course provides participants with an in-depth understanding of ICAO's requirements and prepares them to deal with practical challenges such as effective communication in

emergency and abnormal situations. The workshop is targeted at those charged with developing Aeronautical English testing methods and system, to enhance their understanding of the skills and tools required for the task. Two runs of the course and workshop were conducted in 2007. These were attended by more than 50 participants from 30 States. In view of the positive response, a further run of the course has been scheduled for October 2007.

3.2 Singapore also sought to work with its counterparts to raise awareness and proficiency levels through dialogue and training initiatives. The SAA organized a three-day Conference on Aeronautical English in August 2006, which was attended by about 100 delegates. The international conference provided States and other international stakeholders, such as IFALPA and IFATCA, with an overview of the new language proficiency requirements and gathered much feedback for ICAO.

4. **CONCLUSION**

4.1 Improved proficiency in international radiotelephony communication is crucial to ensure sustainable and safe growth of international civil aviation. To meet the ICAO English language proficiency requirements, Singapore has adopted a comprehensive, integrated approach, comprising a screening, testing and training regime, to ensure its pilots and air traffic controllers are in line with the new ICAO Standards. Steady progress is being made so far to ensure that all pilots and air traffic controllers are assessed and certified, based on their proficiency in the English language. Singapore is keen to share its experience and expertise with other Contracting States who wish to develop a similar testing regime and will continue to reach out to international partners and key aviation stakeholders, through its training courses and other safety initiatives organized by the SAA, to help bring about higher standards in Aviation English proficiency across the world.

4.2 The Assembly is invited to note Singapore's approach to validate the English language proficiency levels for its pilots and air traffic controllers, in accordance with the new ICAO Standards.

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